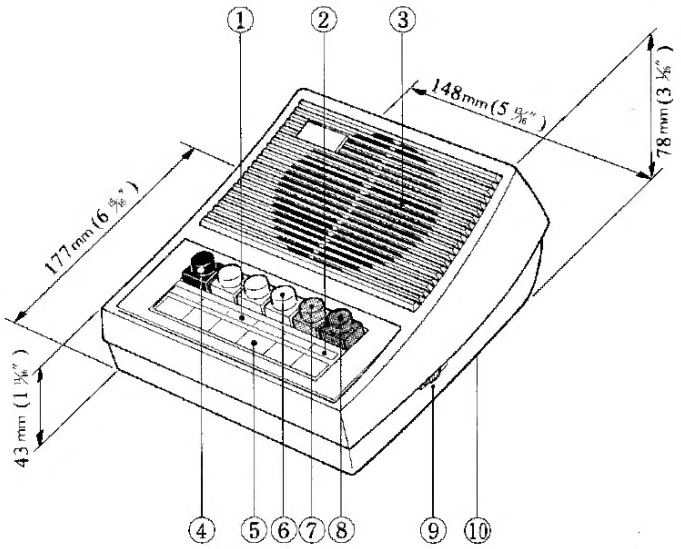
AIPHONE

832551 0687 Ⓓ

LOUDSPEAKER INTERCOM SYSTEM

MODEL: LAF-3A *(Type A) (3-call master)*

— INSTRUCTIONS —



CONTROLS AND FUNCTIONS

① Call annunciator LED
② Occupied lamp
③ Speaker/Microphone
④ Off button
⑤ Directory card
⑥ Selector button
⑦ Privacy button
⑧ Talk button
⑨ Volume control
⑩ Volume control for call tone

SPECIFICATIONS:

MAY BE INTERMIXED WITH AIPHONE MODELS: LAF-5, LAF-10, LAF-10S AND LAF-B SEMI-FLUSH MOUNT MASTERS AND SUBS.

* Power source:	DC 12V. Use PS-12A (or PS-12C in North America) power supply.
* Current consumption:	250 mA maximum.
* Power output:	450 mW maximum at 20 ohm.
* Master station calling:	Push button station selection. **Press privacy and talk buttons simultaneously to call by tone.** Occupied lamp illuminates when the system is in use.
* Wiring:	4 common wires plus 1 individual wire per station between masters or 2 common wires plus 1 individual wire per sub station to master station are required.

FEATURES:

* BGM and All Call can be incorporated, using LAF-10S, LAF-7B or LAF-10B/A, BG-1A/BG-1B and PG-10A/PG-10B.
* Straight paging is available through a 8 ohm horn, using PG-3.
* A call from another master – if no privacy is required – may be replied hands free.
* Privacy button on master and privacy type sub station prevent monitoring and eavesdropping.
* Separate call tone and communication volume controls on master station.
* Eight different sub stations to suit various needs.
* Automatic annunciator lamp memory for sub station call in (LED annunciation is a timed circuit).
* **Calling from LAF-3A (Type A) either by tone or voice.**
* Designed for desk or wall use.

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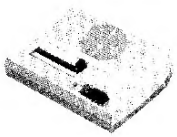
EQUIPMENT AVAILABLE FOR USE WITH YOUR LAF-3A/A LOUDSPEAKER INTERCOM SYSTEM

LAF-3A (Type A):
3 call master station.



LAF-5: 5 call master station.

LAF-10: 10 call master station.

LAF-10S: 10-call master.
Includes all call and door release buttons.

LA-A: Standard sub station.

LA-AN: Privacy type sub station.

LA-A3: 3 call sub station.
Places to and receives calls from up to three master stations.

LA-AN3: 3 call privacy type sub station.

LA-D: Weather resistant sub station.

LA-DA: Flush-mount door station.

PG-3: 3-watt paging amplifier.

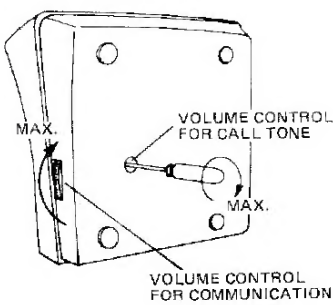
LT-1: 20 ohm to 8 ohm matching transformer. Connects LAF master station to a 8 ohm paging horn.

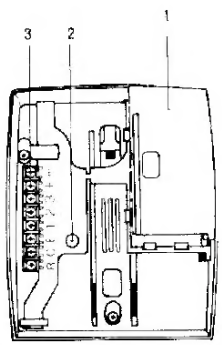
PS-12A: Power supply (not available in North America).
PS-12C: CSA & UL Listed power supply (available only in N. America).

NOTES: *For specification/installation information for Model PG-3, please refer to the Instructions packed with each PG-3 unit.

INSTALLATION

Do not attempt to install your intercom system until you have read and thoroughly understood the installation procedure. Aiphone's warranty is void if system is installed in a manner other than described in this manual.





(Back View)

① Bottom cover. Do not open except for repair purpose.

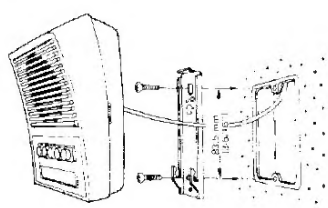
② Volume control for call tone. Adjust to desired level using screw driver.

③ Terminal block;

1, 2, 3	:	for connecting relative stations
C	:	for receiving a call
E	:	for common communication
R	:	for occupied lamp
+ , −	:	for power supply

WALL MOUNTING INSTALLATION

1) Attach mounting bracket to wall or box with supplied screws.
2) Mount station upon the mounting bracket.



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WIRING

Lay out your system in advance. Determine the exact location of each station. Make a sketch showing the number of wires required from each station to other stations. Assign station numbers at this time.

Begin your installation with master station #1. All masters included in your system should be connected and tested before beginning sub station installation. A space is provided at the left of the diagram to write in your color code. Note the position of C terminal on each master station. Be sure you wire each station correctly.

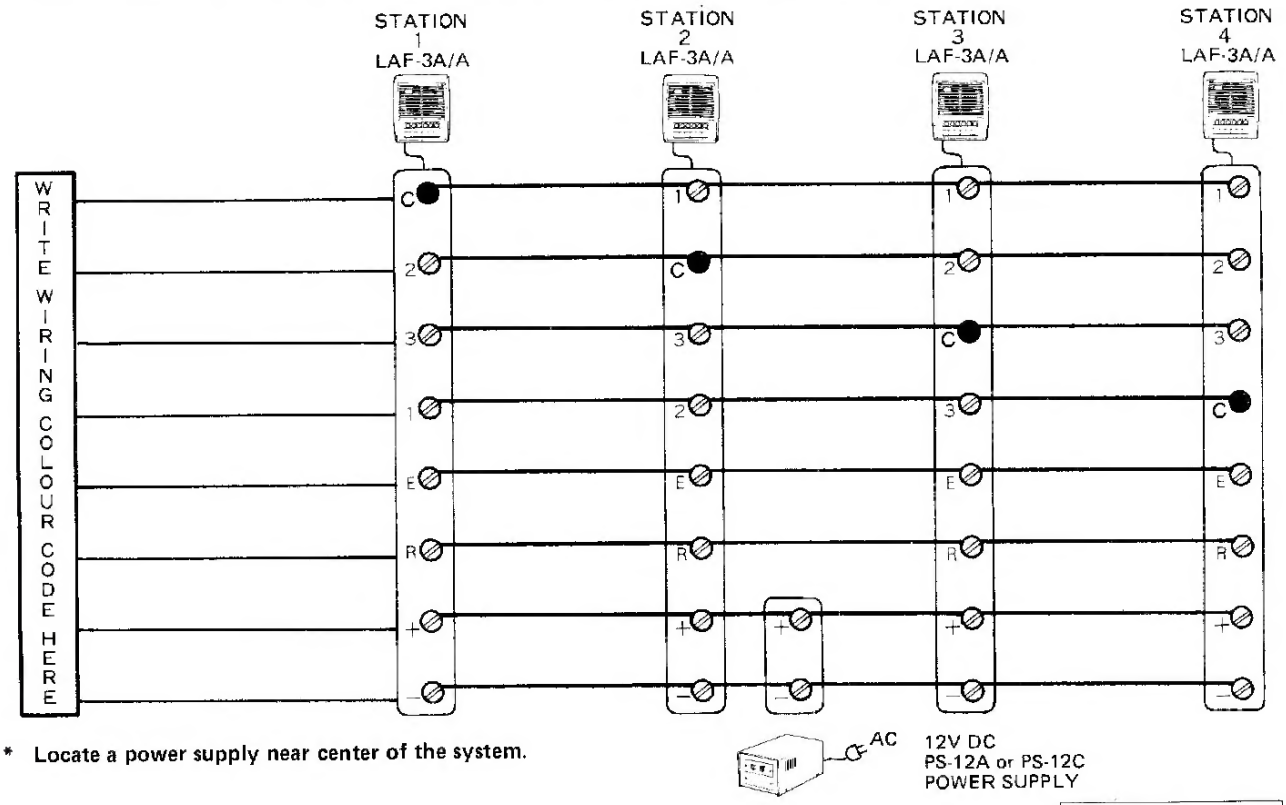
After installing your second station we recommend the power supply be connected to plus and minus and a test be made for all functions calling and talking between each station. Unplug power supply while making connections.

Refer to the chart below and select the proper wire gauge to meet your requirements.

AWG WIRE SIZE	24 AWG	22 AWG	20 AWG	18 AWG
DISTANCE	400′	650′	1000′	1600′

DIAMETER OF WIRE	0.5 mm	0.65 mm	0.8 mm	1.0 mm
DISTANCE	120m	200m	300m	480m

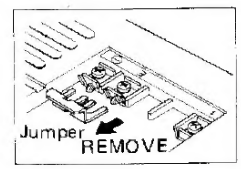
LAF-3A/A ALL MASTER SYSTEM USING PS-12A (or PS-12C) POWER SUPPLY

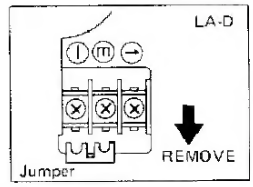


* **Locate a power supply near center of the system.**

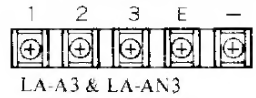
SUB STATION INSTALLATION INFORMATION

LA-A, LA-AN and LA-D/DA: Before attempting to install, remove the shorting link attached to terminals E and ⊖ on LA-A, LA-AN and LA-D/DA sub stations. Connect E, ⊖ and #1 terminals on sub station to E, ⊖ and number terminals on master station.





LA-A3 and LA-AN3: Extend 5 conductors from LA-A3 or LA-AN3 to E, ⊖ and number terminals on first master station and then remainning 2 conductors to number terminals on second and third master stations. Do not wire in a home-run manner.



LA-A3 & LA-AN3

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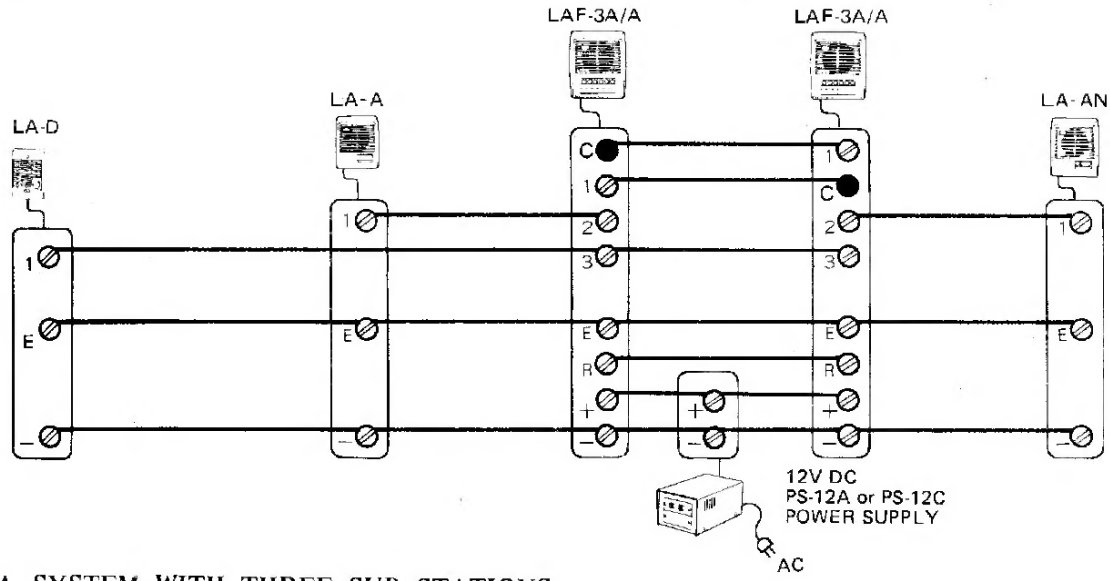
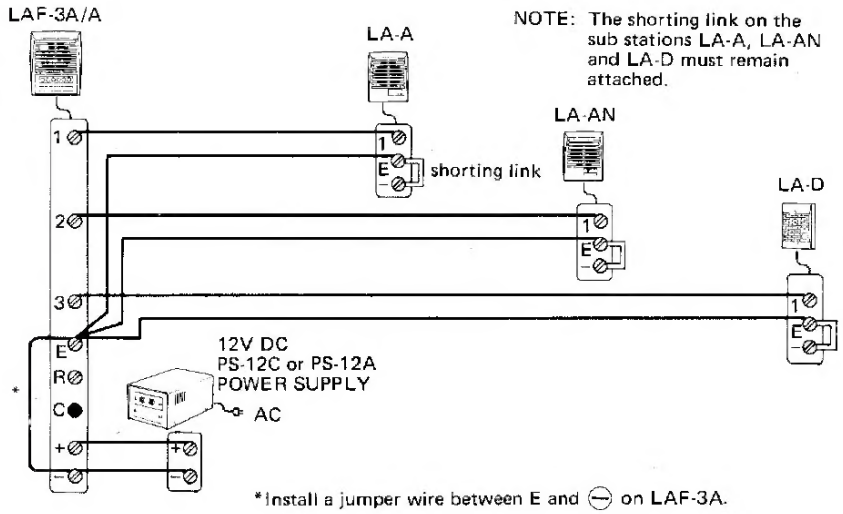
LAF-3A/A SYSTEM WITH LA-A, LA-AN AND LA-D SUBSTATIONS

* In this example a call from LA-D will be received by both masters and can be replied to by either master.



LAF-3A/A SYSTEM WITH THREE SUB STATIONS



SUB STATION OPERATING INSTRUCTIONS

LA-A & LA-D/DA:

1. Depress mometarily call button. You will hear a call tone. Wait for master to answer. After master replies, communication from LA-A is hands free.
2. If no call tone is heard when LA-A call button is depressed, the system is occupied with another conversation. Please call later.

LA-AN:

Calling and talking operation same as LA-A.

LA-AN has privacy switch which allows a call to be received from master but prevents sound going back to master. To place LA-AN in privacy position, depress PRIV button. To release privacy switch for conversation, momentarily depress call botton.

LA-A3:

Same as LA-A except three buttons allowing calling and talking to three masters.

LA-AN3:

Before placing a call, unlock the privacy switch. Calling and talking operation same as LA-A3. At conclusion of conversation, depress privacy button.

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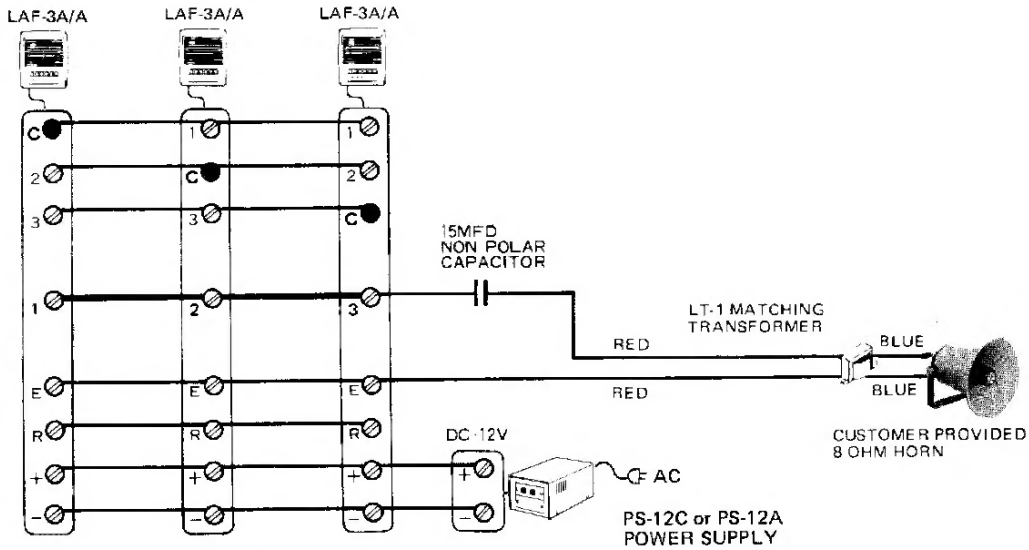
LAF-3A/A SYSTEM WITH TALKBACK PAGING HORN

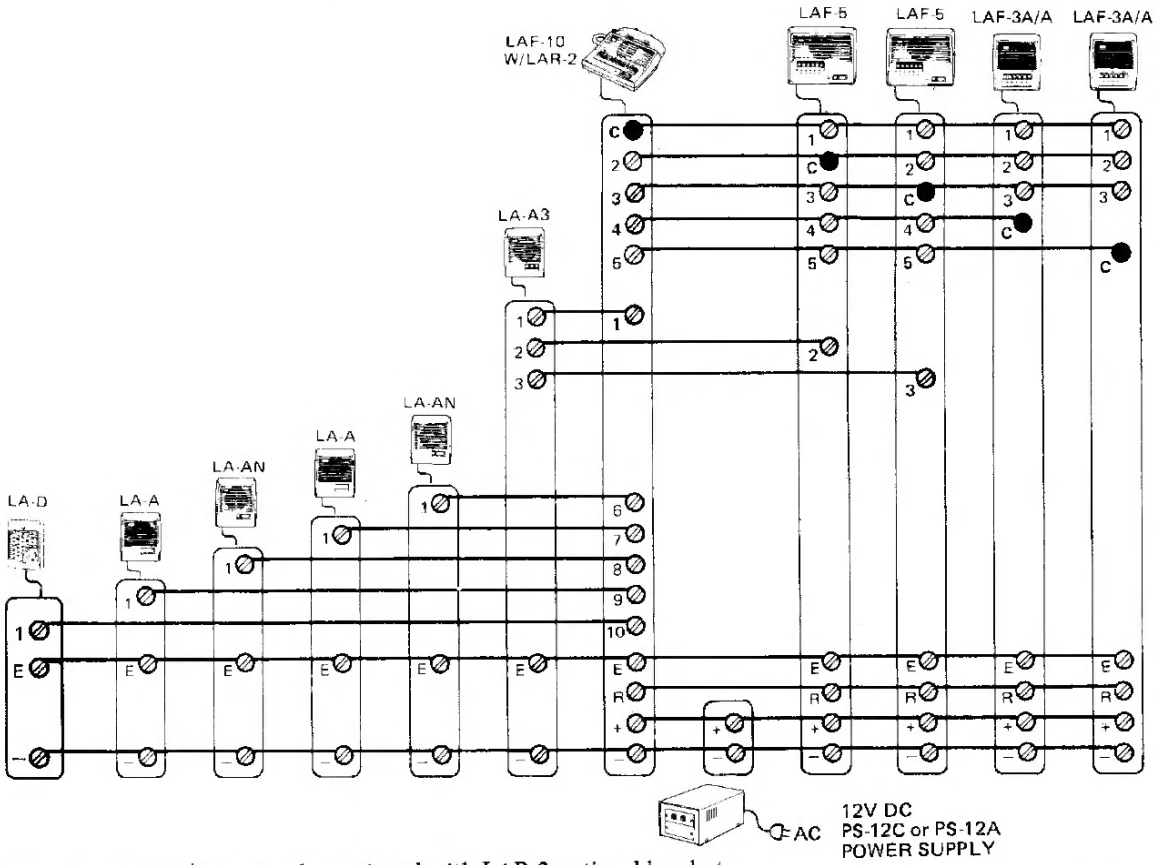
Your LAF system can not be connected to a standard paging system. In addition your LAF system was not designed to incorporate talkback paging horn substations. However, a talkback paging horn may be added to your system as shown below.

LT-1 matching transformer is designed for using a standard 8 ohm horn in place of a substation.
15 MFD non-polarized capacitor must be installed between number terminal on master and a red lead of LT-1.



INTERMIXED MASTER STATIONS AND SUBSTATIONS

* Equipment available for use with a LAF system can be intermixed to provide a communications network to meet your requirements. With proper pre-installation planning, your LAF system can become one of the most useful and versatile intercom networks available.



NOTE: 1) LAF-3A/A can not be equipped with LAR-2 optional handset.
2) For installation information for Models: LAF-5 and LAF-10, please refer to the sheet packed with each unit.

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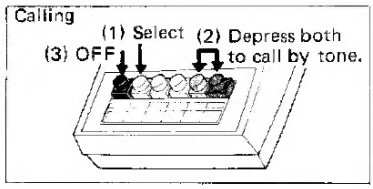
LAF-3A/A MASTER STATION OPERATION



* **Placing a call;**

1) If occupied lamp is not illuminated, depress a selector button of the desired station. Then depress talk button to call by voice direct. **To call by tone, depress privacy and talk buttons simultaneously.**
2) Depress talk button to talk, and release to listen.
3) Upon completing conversation, depress off button.

NOTE: OFF button on LAF-3A/A master station, when depressed, puts station in standby mode as well as off mode. OFF button MUST BE DEPRESSED AND LOCKED DOWN on all master stations except station initiating a call or system will not work.

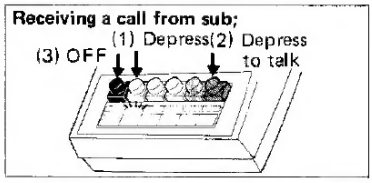
* **Receiving a call from another master;**

1) When your station is non-privacy position, no action is required and communication is hands free.
2) When your station is switched for privacy, release privacy switch by depressing talk button, then resume hands free communication. Upon completing conversation, lock privacy switch or you can be monitered by other stations.

NOTE: There is no lamp annunciation between master stations except the occupied lamp.

* **Receiving a call from a sub station;**

1) An incoming call is annunciated both by tone and lamp. Depress a selector button above the lighted call lamp.
2) Use talk button to control communications. Upon completing conversation depress off button.



NOTE: When you receive calls from another master and a sub at the same time reply first to master and, after the occupied lamp goes out, depress the selector button of the calling sub and communicate.
DO NOT DEPRESS THE SELECTOR BUTTON WHILE OCCUPIED LAMP ILLUMINATES.

CLEANING YOUR INTERCOM STATIONS

* Your Aiphone intercom,stations may be cleaned with a soft cloth dampened with household cleanser, such as Mr. Clean or Fantastik.

* * *

We at AIPHONE are proud of our products. Our designers and engineers strive to bring you the finest in communication equipment. Each item has been carefully tested and inspected before leaving our factory. Properly installed and used, your Aiphone intercon. system should give years of trouble-free service.

We are pleased to offer the following warranty:

WARRANTY

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of one year after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty does not cover batteries or damage caused by batteries used in connection with the product.

This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

Aiphone Co., Ltd., Nagoya, Japan
Aiphone Corporation, Bellevue, Washington

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